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NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 01/15/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747

EXAMINER					
TRAN, NHAN T					
ART UNIT	PAPER NUMBER				
2622	•				

DATE MAILED: 01/15/2009

 APPE/CATION NO.
 FILINO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/6/3 651
 07/22/2003
 Nacki Kubo
 0/3/8-0400P
 4744

 $\label{thm:compensation} \emph{TITLE OF INVENTION: APPARATUS FOR COMPENSATING FOR SHADING ON A PICTURE PICKED UP BY A SOLID-STATE IMAGE SENSOR OVER A BROAD DYNAMIC RANGE$

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitting the ISS ig the Patent, advance of herwise in Block 1, by (orders and notification of r (a) specifying a new corre	naintenance fees wi pondence address;	ill be i and/or	mailed to the current (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
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PO BOX 747	7590 01/15 ART KOLASCH TH, VA 22040-0747	& BIRCH		Cont	ificata	of Mailing on Trans	
							(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/623,651 TITLE OF INVENTION OVER A BROAD DYN,		OMPENSATING FOR S	Naoki Kubo SHADING ON A PICTUR	E PICKED UP BY .		0378-0400P JD-STATE IMAGE	4744 SENSOR
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	04/15/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS]			
TRAN, N	HAN T	2622	348-251000	•			
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATZ ess an assignee is ident h in 37 CFR 3.11. Comp	inge of Correspondence Indication form and. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a single registered autorney or a 2 registered patent and issed, no name will be THE PATENT (print or ty) data will appear on the p T a substitute for filing an (B) RESIDENCE: (CTTY	3 registered patent vely, e firm (having as a agent) and the name rneys or agents. If n printed.	members of up	er a 2 2 5 to 6 to 6 to 7 to 7 to 7 to 7 to 7 to 7	locument has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	orinted on the patent):	Individual 🚨 Cor	rporati	on or other private gr	oup entity Government
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p		bb. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched.	shown above) eficiency, or credit any un extra copy of this form).
	s SMALL ENTITY state	us. See 37 CFR I.27.	☐ b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademar	ed from anyone other than t k Office.	he applicant; a regis	tered a	ttorney or agent; or the	he assignee or other party in
Authorized Signature				Date			
Typed or printed name	e			Registration No	D		
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	ion is required to obtain or it. 1.14. This collection is est y depending upon the individue Chief Information Office COMPLETED FORMS To	etain a benefit by th imated to take 12 m idual case. Any cor er, U.S. Patent and 1 D THIS ADDRESS.	ne publ ninutes nment: Fradem . SENI	ic which is to file (an- to complete, includir s on the amount of ti- nark Office, U.S. Dep O TO: Commissioner	d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/623,651	(07/22/2003	Naoki Kubo	0378-0400P 4744		
2292	7590	01/15/2009		EXAMINER		
BIRCH STEWART KOLASCH & BIRCH			TRAN, NHAN T			
PO BOX 747			ART UNIT	PAPER NUMBER		
FALLS CHURCH, VA 22040-0747			2622			

DATE MAILED: 01/15/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 971 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 971 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/623 651 KUBO, NAOKI Notice of Allowability Examiner Art Unit NHAN T TRAN 2622 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to amendment filed 10/08/2008. The allowed claim(s) is/are 1-10. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

/NHAN T TRAN/ Primary Examiner, Art Unit 2622 9. ☐ Other .

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Art Unit: 2622

DETAILED ACTION

Response to Arguments

 Applicant's arguments, filed 10/8/2008, with respect to claims 1-10 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

Allowable Subject Matter

- Claims 1-10 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 1, the prior art of record fails to teach or fairly suggest the *combination of all limitations* of claim 1 that includes "each of said plurality of photo-sensors corresponding to a particular pixel included in an imaging frame, each of said plurality of photo-sensors comprising a first photosensitive cell having first sensitivity for photoelectrically transducing incident light to generate a signal charge and a second photosensitive cell having second sensitivity lower than the first sensitivity for photoelectrically transducing incident light to generate a signal charge" and "said first photosensitive cell has a first photosensitive area and the second photosensitive cell has a second photosensitive area smaller than the said first photosensitive area, and wherein the shading characteristic of said first photosensitive cell used by said corrector relates to said first photosensitive area and the shading characteristic of said

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second photosensitive cell used by said corrector relates to said second photosensitive area."

Regarding independent claim 7, the reason for allowance has been stated by the Applicant in the remarks filed 10/8/2008.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to NHAN T. TRAN whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday. 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NHAN T TRAN/ Primary Examiner, Art Unit 2622 6.